



**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2018-0834; Product Identifier 2018-SW-058-AD; Amendment 39-19421; AD 2018-16-51]**

**RIN 2120-AA64**

**Airworthiness Directives; Bell Helicopter Textron Canada Limited Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule; request for comments.

**SUMMARY:** We are publishing a new airworthiness directive (AD) for Bell Helicopter Textron Canada Limited (Bell) Model 429 helicopters. This AD was sent previously to all known U.S. owners and operators of these helicopters as Emergency AD 2018-16-51, dated July 26, 2018, which superseded Emergency AD 2018-15-51, dated July 20, 2018. This AD requires inspecting the tail rotor (T/R) gearbox installation, inspecting the T/R gearbox retaining hardware and support attachment point areas, and replacing each nut. This AD is prompted by two reports of T/R gearbox assemblies loosely attached to the gearbox support. The actions of this AD are intended to address an unsafe condition on these products.

**DATES:** This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] to all persons except those persons to whom it was made immediately effective by Emergency AD 2018-16-51, issued on

July 26, 2018, which contains the requirements of this AD.

We must receive comments on this AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Docket: Go to <http://www.regulations.gov>. Follow the online instructions for sending your comments electronically.

- Fax: 202-493-2251.

- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.

- Hand Delivery: Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0834; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the Transport Canada AD, the economic evaluation, any comments received, and other information. The street address for Docket Operations (telephone 800- 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this final rule, contact Bell Helicopter Textron Canada Limited, 12,800 Rue de l’Avenir, Mirabel, Quebec J7J1R4; telephone (450) 437-2862 or (800) 363-8023; fax (450) 433-0272; or at

<http://www.bellcustomer.com/files/>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

**FOR FURTHER INFORMATION CONTACT:** Matt Fuller, Senior Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email [matthew.fuller@faa.gov](mailto:matthew.fuller@faa.gov).

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

This AD is a final rule that involves requirements affecting flight safety, and we did not provide you with notice and an opportunity to provide your comments prior to it becoming effective. However, we invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that resulted from adopting this AD. The most helpful comments reference a specific portion of the AD, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit them only one time. We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this rulemaking during the comment period. We will consider all the comments we receive and may conduct additional rulemaking based on those comments.

**Discussion**

Transport Canada, which is the aviation authority for Canada, issued Emergency AD No. CF-2018-18, dated July 11, 2018, to correct an unsafe condition for Bell Model 429 helicopters. Transport Canada advises of two reports of T/R gearbox assemblies loosely attached to the gearbox support. According to Transport Canada, this condition could lead to structural damage and possible loss of control of the helicopter.

As a result, on July 20, 2018, we issued Emergency AD 2018-15-51 (Emergency AD 2018-15-51), which required inspecting the T/R gearbox installation for looseness, visually inspecting the T/R gearbox retaining hardware and support attachment point areas, and torque inspecting the gearbox retaining nuts. Depending on the inspection results, Emergency AD 2018-15-51 required replacing or repairing the affected parts in accordance with FAA-approved procedures. Emergency AD 2018-15-51 was sent previously to all known U.S. owners and operators of these helicopters. The actions in Emergency AD 2018-15-51 were intended to prevent detachment of the T/R gearbox, loss of T/R control, and loss of control of the helicopter.

After we issued Emergency AD 2018-15-51, we discovered an error in the replacement nut P/N. The required replacement nut P/N is NAS9926-6L; not NAS9926-5L as incorrectly stated in Emergency AD 2018-15-51. Therefore, on July 26, 2018, we issued Emergency AD 2018-16-51 to supersede Emergency AD 2018-15-51 to correct the nut P/N. Emergency AD 2018-16-51 otherwise retains all of the requirements of Emergency AD 2018-15-51. Emergency AD 2018-16-51 was also sent previously to all known U.S. owners and operators of these helicopters.

#### **FAA's Determination**

These helicopters have been approved by the aviation authority of Canada and are

approved for operation in the United States. Pursuant to our bilateral agreement with Canada, Transport Canada, its technical representative, has notified us of the unsafe condition described in the Transport Canada AD. We are issuing this AD because we evaluated all information provided by Transport Canada and determined the unsafe condition exists and is likely to exist or develop on other helicopters of the same type design.

### **Related Service Information**

We reviewed Bell Alert Service Bulletin 429-18-40, dated July 6, 2018, which specifies a one-time inspection of the T/R gearbox installation and a one-time visual and torque inspection of the six installation attachment points. This service information also specifies contacting Bell Product Support Engineering with the results of the T/R gearbox installation inspection, any findings of the visual inspection, and the results of the torque inspection.

### **AD Requirements**

This AD requires inspecting the T/R gearbox installation for looseness, visually inspecting the T/R gearbox retaining hardware and each support attachment point area, and torque inspecting each gearbox retaining nut. Depending on the inspection results, this AD requires replacing or repairing the affected parts in accordance with FAA-approved procedures.

### **Differences between this AD and the Transport Canada AD**

The Transport Canada AD applies to helicopters with specific serial numbers, whereas this AD applies to all Model 429 helicopters. The Transport Canada AD includes a calendar based compliance time, whereas this AD does not. The Transport Canada AD

requires reporting certain information to Bell Product Support Engineering and this AD does not. If there is looseness, this AD requires performing the visual inspection and torque inspection before further flight, while the Transport Canada AD requires contacting Bell. Lastly, if the torque of a T/R gearbox retaining nut is below 160 in-lbs (19 Nm), this AD requires removing the T/R gearbox and inspecting the mounting surfaces and retaining hardware, while the Transport Canada AD requires contacting Bell.

### **Interim Action**

We consider this AD to be an interim action. If final action is later identified, we might consider further rulemaking then.

### **Costs of Compliance**

We estimate that this AD affects 90 helicopters of U.S. Registry. We estimate that operators may incur the following costs in order to comply with this AD. Labor costs are estimated at \$85.00 per work-hour.

Inspecting the T/R gearbox installation takes about 0.25 work-hour for an estimated cost of \$21 per helicopter and \$1,890 for the U.S. fleet. Inspecting the T/R gearbox retaining hardware and the support attachment points takes about 0.5 work-hour for an estimated cost of \$43 per helicopter and \$3,870 for the U.S. fleet. Replacing the nuts takes about 1 work-hour and parts cost about \$20 for an estimated cost of \$105 per helicopter and \$9,450 for the U.S. fleet.

### **FAA's Justification and Determination of the Effective Date**

An unsafe condition exists that required the immediate adoption of Emergency AD 2018-16-51, issued on July 26, 2018, to all known U.S. owners and operators of these

helicopters. The FAA found that the risk to the flying public justified waiving notice and comment prior to adoption of this rule because there are required actions that must be completed before further flight and within 5 hours time-in-service. These conditions still exist and the AD is hereby published in the Federal Register as an amendment to section 39.13 of the Federal Aviation Regulations (14 CFR 39.13) to make it effective to all persons. Therefore, we find good cause that notice and opportunity for prior public comment are impracticable. In addition, for the reasons stated above, we find that good cause exists for making this amendment effective in less than 30 days.

#### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

#### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on

the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):



2018-16-51 **Bell Helicopter Textron Canada Limited:** Amendment 39-19421; Docket No. FAA-2018-0834; Product Identifier 2018-SW-058-AD.

**(a) Applicability**

This AD applies to Model 429 helicopters, certificated in any category.

**(b) Unsafe Condition**

This AD defines the unsafe condition as a loose tail rotor (T/R) gearbox support attachment point. This condition could result in detachment of the T/R gearbox, loss of T/R control, and loss of control of the helicopter.

**(c) Related ADs**

This AD requires the same actions as Emergency AD 2018-16-51, dated July 26, 2018, which superseded Emergency AD 2018-15-51, dated July 20, 2018.

**(d) Effective Date**

This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] to all persons except those persons to whom it was made immediately effective by Emergency AD 2018-16-51, issued on July 26, 2018, which contains the requirements of this AD.

**(e) Compliance**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(f) Required Actions**

(1) Before further flight, inspect for looseness of the T/R gearbox installation to the T/R gearbox structural support by moving the T/R gearbox output shaft in an upward and downward direction. If the T/R gearbox installation is loose, before further flight,

complete the actions required by paragraphs (f)(2)(i) and (ii) of this AD.

(2) Within 5 hours time-in-service, unless already completed as required by paragraph (f)(1) of this AD:

(i) Visually inspect the T/R gearbox retaining hardware and each support attachment point area for evidence of fretting, a crack, and incorrect installation. If there is any evidence of fretting, a crack, or incorrect installation, before further flight, repair in accordance with FAA-approved procedures.

(ii) Inspect each T/R gearbox retaining nut by applying 160 in-lbs (19 Nm) of torque. If the torque of a T/R gearbox retaining nut is below 160 in-lbs (19 Nm), before further flight:

(A) Remove the T/R gearbox and inspect each stud for proper staking, each stud thread for uniformity, each mounting surface for evidence of fretting and cracking, and each mounting hole for elongation. If a stud is not properly staked, a stud thread is not uniform, a mounting surface has evidence of fretting or cracking, or a mount hole is elongated, before further flight, replace the affected parts or repair in accordance with FAA-approved procedures.

(B) Replace each nut with nut part number NAS9926-6L and apply a torque of 160 in-lbs.

**(g) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Safety Management Section, Rotorcraft Standards Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Matt Fuller, Senior Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email

9-ASW-FTW-AMOC-Requests@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

**(h) Additional Information**

(1) Bell Alert Service Bulletin 429-18-40, dated July 6, 2018, which is not incorporated by reference, contains additional information about the subject of this AD. For service information identified in this AD, contact Bell Helicopter Textron Canada Limited, 12,800 Rue de l'Avenir, Mirabel, Quebec J7J1R4; telephone (450) 437-2862 or (800) 363-8023; fax (450) 433-0272; or at <http://www.bellcustomer.com/files/>. You may review a copy of the service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

(2) The subject of this AD is addressed in Transport Canada AD No. CF-2018-18, dated July 11, 2018. You may view the Transport Canada AD on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2018-0834.

**(i) Subject**

Joint Aircraft Service Component (JASC) Code: 6520, Tail Rotor Gearbox.

Issued in Fort Worth, Texas, on October 5, 2018.

Lance T. Gant,

Director, Compliance & Airworthiness Division,  
Aircraft Certification Service.

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